

(No Model.)

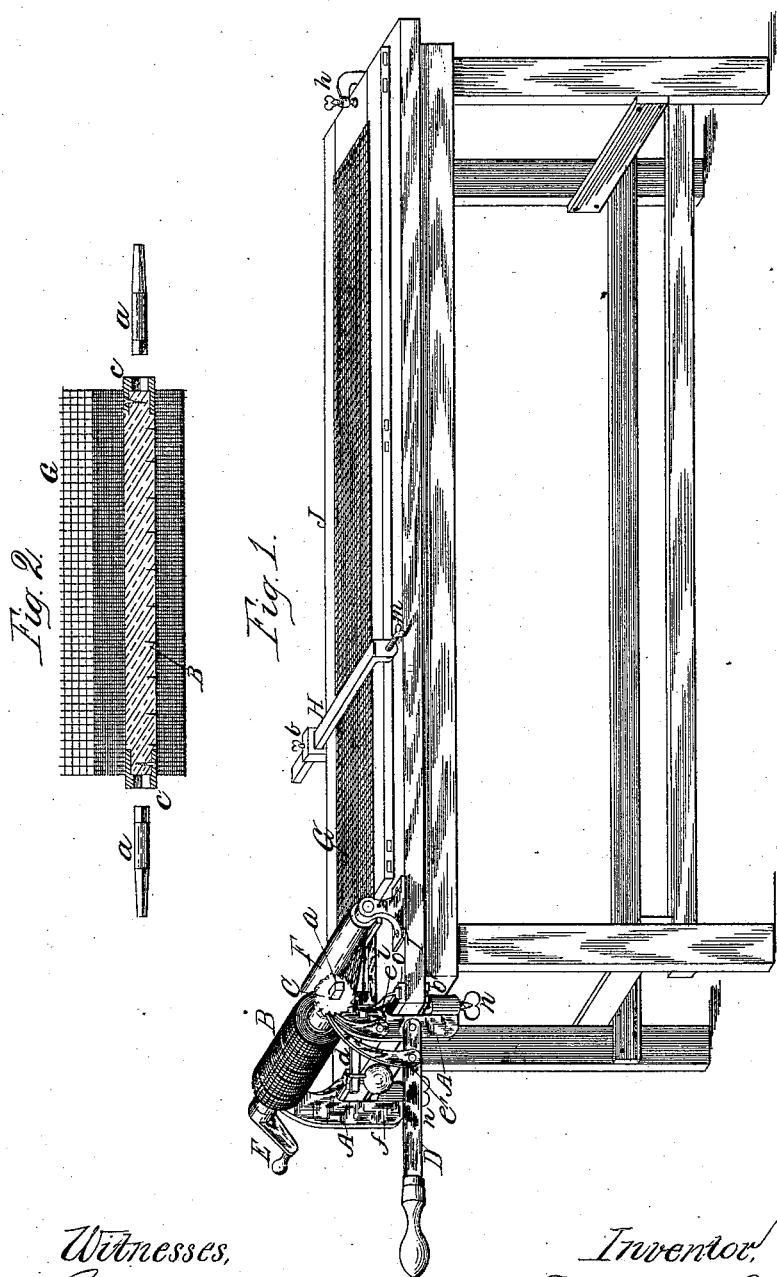
2 Sheets—Sheet 1.

O. D. WOLCOTT.

MACHINE FOR ATTACHING THE WIRE SCREENS TO THE FRAMES OF  
SCREEN DOORS.

No. 301,844.

Patented July 8, 1884.



Witnesses,  
Geo. H. Fennell  
Frank A. Clark

Inventor,  
Orville D. Wolcott  
By Justus M. St. John  
His Atty.

(No Model.)

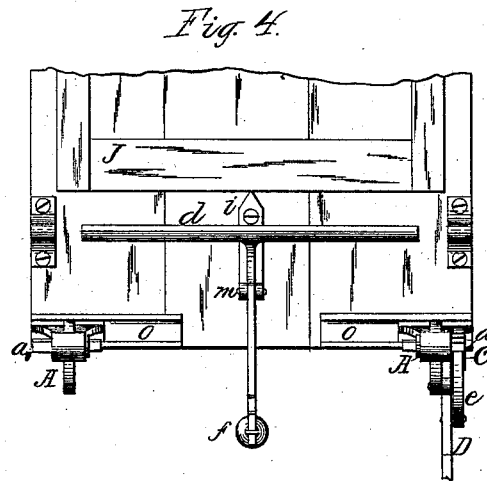
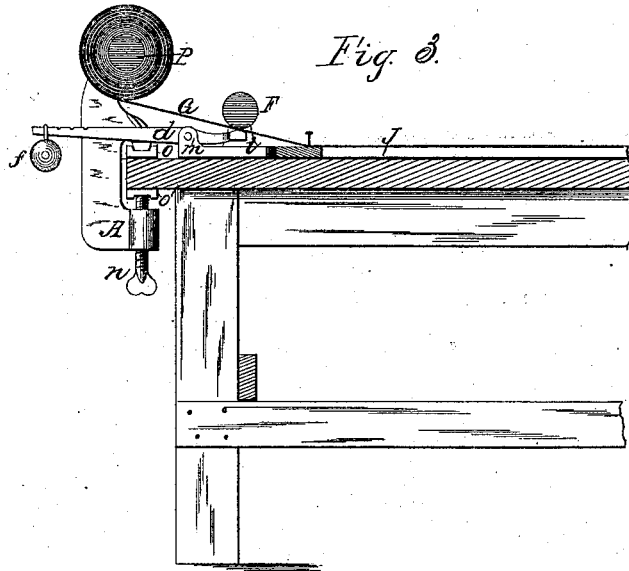
2 Sheets—Sheet 2.

O. D. WOLCOTT.

MACHINE FOR ATTACHING THE WIRE SCREENS TO THE FRAMES OF  
SCREEN DOORS.

No. 301,844.

Patented July 8, 1884.



*Witnesses.*

Geo. H. Fenn  
Mumf. & Clark

*Inventor.*

Crville D. Wolcott.  
 By Justus M. St. John  
 His Atty.

# UNITED STATES PATENT OFFICE.

ORVILLE D. WOLCOTT, OF CEDAR RAPIDS, IOWA.

MACHINE FOR ATTACHING THE WIRE-SCREEN TO THE FRAME OF SCREEN-DOORS.

SPECIFICATION forming part of Letters Patent No. 301,844, dated July 8, 1884.

Application filed February 20, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ORVILLE D. WOLCOTT, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Machines for Manufacturing Screen-Doors, of which the following is a specification.

The object of this invention is to shorten and simplify the operation of attaching the screen to the frame-work of screen doors and windows by providing mechanism to stretch the screen upon said frame-work and hold it securely in position while being tacked thereto.

In the accompanying drawings, forming a part of this specification, Figure 1 represents a side perspective of the invention; and Fig. 2, a longitudinal section of the roll, showing the detail of its construction. Fig. 3 is a sectional side elevation of one end of the table and portions of the mechanism thereto attached, and Fig. 4 a plan view of the same with the rolls removed.

Similar letters of reference indicate corresponding parts.

The screen G is secured at one end to a cylinder, B, and rolled up. This is done at the factory, and is then conveniently shipped to dealers. The cylinder is preferably of wood, and is provided at each end with a metallic socket, c, having square holes adapted to receive the corresponding end of a journal, a. The outer end of the journal is also squared, and upon this end is placed a ratchet, C, and upon one or the other of them a crank, E, by means of which the web may be quickly rolled up when extended for exhibition at the dealer's counter, or for any other purpose. The roll is mounted upon standards A A, which may be secured to any bench, table, or counter by means of set-screws n n. To one of these standards is pivoted a pawl, e, adapted to operate in the teeth of the ratchet C, and act as a take-up for the pawl e' on the lever D, also pivoted to this standard. Channeled clamp-irons o o' prevent the abrasion of the wood in the bench, and also aid in securing the standards more firmly in position. In front of the screen-roll is a smaller roller, F, designed to hold the screen close to the frame-

work, regardless of the size of the roll of material behind it. Under this roller and central with the work-bench is a stop, i, to hold the door J from slipping endwise as the screen is drawn up. The stop is provided with upwardly-extending lugs M, and to these is pivoted a T-shaped brake, d, the outer end of which is supplied with a weight, f, by means of which the transverse head, between which and the roller F the screen G passes, is given sufficient pressure to hold the free end of the web when the portion secured to the door is cut off. The opposite end of the frame is fastened to the bench by a clamp, h.

The operation of attaching the screen is very simple. The frame being in position, the pawls are disengaged and the screen is drawn to the lower end, where it is tacked, as shown in the drawings. The pawls are then put in position, when, by an upward movement of the lever D, the screen is drawn tightly over the frame and held in that position while being tacked.

Hitherto it has been a slow and laborious operation to draw the screen tight enough, and without great care the web was liable to be unevenly stretched. These difficulties are entirely overcome by the invention above described. Ordinarily the web requires but little stretching sidewise; but in order to secure all that may be necessary I spring in the sides of the frame slightly by means of the adjustable clamp H, having a suitable thumb-screw, m, then tack the screen to them. On being released the straightening of the sides draws the screen perfectly smooth and tight.

The invention not only lightens the labor and lessens the expense of making screen-doors, while at the same time producing a superior article, but it also affords a convenient means for handling wire-screen, as the device, or so much of it as is necessary, may be attached to the end of a counter or other suitable place in the store of the retail dealer, and from the roll so mounted the screen may be quickly unrolled for sale or for display.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for making screen-doors, a roll for stretching the screen, journaled in

standards secured to the table, which is provided with a stop to prevent the frame from slipping when the screen, fastened to its opposite end, is stretched by winding it on the roll, substantially as specified.

5 2. In a machine for the purpose specified, the combination of roll B, standards A A, secondary roller F, and stop *i*, substantially as shown and described.

10 3. In a machine for the purpose specified, the combination of roll B, stop *i*, secondary roller F, and brake *d*, all constructed, arranged, and operating substantially as set forth.

15 4. In a machine for manufacturing screen-doors, the combination of roller F, brake *d*, and weight *f*, substantially as and for the purpose set forth.

5. In a machine for the purpose designated, the combination of roller F, brake *d*, and stop *i*, with a table adapted to hold a door or window frame, substantially as shown and described.

6. In combination with the adjustable and removable standards A A of a machine for the purpose specified, the channeled clamp- 25 irons *o o'*, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ORVILLE D. WOLCOTT.

Witnesses:

SAML. M. ENDICOTT,

FRANK G. CLARK.